



Course syllabus

Faculty of Technology
Department of Computer Science

4DV199 Innovation och entreprenörskap inom IT-branschen, 15 högskolepoäng

Innovation and Entrepreneurship within the IT Industry, 15 credits

Main field of study

Computer Science

Subject Group

Informatics/Computer and Systems Sciences

Level of classification

Second Level

Progression

A1N

Date of Ratification

Approved by Faculty of Technology 2015-08-18

The course syllabus is valid from autumn semester 2015

Prerequisites

Bachelor degree in Computer Science or equivalent subject.

Objectives

The objective of this course is twofold. Firstly, it will provide the student with theoretical and practical knowledge regarding entrepreneurial competence development of the IT based value using modern software development methodologies. Secondly, it will provide the student with a set of theoretical concepts and practical tools that can be used for understanding how IT-based innovative ideas and solutions can potentially be transformed into economic, social and/or other forms of value of which a distinct demand can be identified.

Upon completion of the course, the student shall:

- Have demonstrated a good understanding of the different stages and aspects of the three dimensions of the entrepreneurial process (creativity, innovation, entrepreneurship), how they differ as well as how they are intertwined in the IT industry.
- Be able to understand how and why exposure to the three main dimensions of the entrepreneurial process stimulate entrepreneurial competence development, for the individual IT entrepreneur as well as for the entrepreneurial IT team.
- Have demonstrated an in-depth understanding of and skills for initiating a development process of an IT-based value offer (commodity, product, service, experience or a bundle of), by doing business modeling and writing a business plan.
- Have shown in-depth understanding of the challenges and benefits of academic

cooperation between IT related academic disciplines and business administration related academic disciplines as well as cooperation between the academia and the business world.

- Be able to assess the potential and feasibility of a new IT-based venture, with a specific focus on how to identify and make use of different entrepreneurial financing models and alternatives, and what role entrepreneurial judgment and entrepreneurial identity plays in decision-making processes about which model/alternative to go for in any specific situation.

Content

The content of the course consists of different topics related to entrepreneurial competence development and IT based value creation. The execution of a team project for an IT based value using modern software development methodology will be the practical component of this course in which the theoretical aspects will be practiced and the practical doings will be theorized. The main focus is to gradually integrate the entrepreneurship and innovation part with development of an IT based value into a coherent whole by the end of the course, as this is key to entrepreneurial competence development within IT industry.

The entrepreneurship and innovation part will cover the following topics:-What entrepreneurial judgment is and why is it crucial for entrepreneurial competence development within IT industry.-What entrepreneurial identity is and why is it crucial for entrepreneurial competence development while creating an IT based value.-Various aspects of the entrepreneurial process:

- The relationship of creativity and innovation to management of IT projects.
- How opportunity and innovation are linked within the IT domain.
- Various types of innovation.
- How to work and think processual in loops between:
 - Creative idea generating,
 - Opportunity creation,
 - Turning an opportunity into innovation,
 - Bringing an innovation to the market,
 - Bringing market data back in-door, to inform never-ending loops of creativity, innovation and entrepreneurship processes within IT-based value creation

-How to do and make use of business model canvases and business plans in order to firstly understand and make sense of your own processes and thinking and secondly to be able to communicate your own processes and thinking to others.

-The creation of an IT based value will be based on utilizing modern software development approaches.

Type of Instruction

Lectures, seminars and workshops

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Assessment in this course will be comprised of: written and/or oral examinations, assignments as well as mandatory seminar work. At the beginning of the course it will be decided on what types of assessment will be used.

Students who do not pass the regular examination are given the opportunity to do a reexamination shortly after the regular exam.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

- Blundel, Richard. & Lockett, Nigel. (Latest edition). Exploring Entrepreneurship. Practices and Perspectives. Oxford: Oxford University Press, pp. 233-429.
- Huff, Anne. Sigismund.; Möslein, Kathrin. M. & Reichwald, Ralf. (2013). Leading Open Innovation. Cambridge, Mass.: The MIT Press, 322 pages.
- Osterwalder, Alexander. & Pigneur, Yves. (Latest edition). Business Model Generation. Self-published, pp. 1-72.
- Lang, Jack. (Latest edition) The High-tech Entrepreneur's Handbook: How to Start and Run a High-tech Company. Pearson Education
- Volkman, Christine.K.; Tokarski, Kim.Oliver. & Grünhagen, Marc. (2010). Entrepreneurship in a European Perspective. Concepts for the Creation and Growth of New Ventures. Wiesbaden, Gabler Verlag, pp. 283-450.
- Department of Computer science, Distributed materials, 200 pages